

APPENDIX D



WHERE BUSINESS AND THE ENVIRONMENT CONVERGE

588 Silver Street, Agawam, MA 01001 tel 413.789.3530 fax 413.789.2776 www.ecsconsult.com

Mr. James Morrissey
Senior Architect
Facilities and Campus Planning Division
University of Massachusetts – Amherst
360 Campus Center Way
Amherst, MA 01003

August 14, 2009
Project No. 01-207783.00
Document No. 38075

RE: Limited Asbestos and Lead Paint Inspection
Waltham Research Station
Main Barn, Calf Barn and Garage
University of Massachusetts

Dear Jim:

As per your request, Environmental Compliance Services, Inc. (ECS) has completed a limited inspection of building materials for the presence of asbestos-containing materials (ACMs) and lead containing paint (LCP). Materials inspected were from the proposed renovation areas as defined in WR # 06-000809.

On July 7, 2009 ECS personnel collected a total of 4 bulk samples of various suspect roofing materials for asbestos determination. These materials were deemed homogenous with other building materials located in the areas of the proposed renovations.

Laboratory test results DID INDICATE THE PRESENCE OF ASBESTOS.

The inspection sample locations and findings are detailed on the tables below. The sampling inspection forms and laboratory data sheets are enclosed with this letter.

**SUSPECT MATERIALS WITH ASBESTOS DETECTED
WALTHAM RESEARCH STATION
MAIN BARN, CALF BARN AND GARAGE
UNIVERSITY OF MASSACHUSETTS**

Functional Space (s)	Material Description	Sample Number
Waltham Research Station; Calf Barn	Square transite roof shingles	WA-3

Mr. James Morrissey

University of Massachusetts - Amherst

August 14, 2009

Page 2

SUSPECT MATERIALS WITH NO ASBESTOS DETECTED
WALTHAM RESEARCH STATION
MAIN BARN, CALF BARN AND GARAGE
UNIVERSITY OF MASSACHUSETTS

Functional Space (s)	Material Description	Sample Number
Waltham Research Station; Garage	Roofing Material (shingles and paper barrier), form the area of large hole in the roof	WA-1
Waltham Research Station; Main Barn	Roofing Material (shingles and paper barrier), collected from the ground underneath the large hole in the roof	WA-2
Waltham Research Station; Calf Barn	Black roofing barrier found on the ground under large collapsed roof area	WA-4

On July 7, 2009 ECS personnel collected a total of 10 bulk sample of paint for total lead determination. These materials were also deemed homogenous with other building materials located in the area of the proposed renovation. Exact sample locations are detailed on the table below and the sampling inspection forms. The laboratory data sheets are enclosed with this letter. Laboratory test results DID INDICATE THE PRESENCE OF LEAD above method detection limits. All samples were submitted to ProScience Analytical Services an accredited laboratory for asbestos and lead determination.

LEAD ANALYSIS RESULTS
WALTHAM RESEARCH STATION
MAIN BARN, CALF BARN AND GARAGE
UNIVERSITY OF MASSACHUSETTS

Building	Description	Sample ID	Substrate and location	Result (% weight)
Waltham Research Station; Garage	White Paint	W-1	Wood trim around doors and windows	6.84
Waltham Research Station; Main Barn	White/Tan Paint	W-2	Large wood door frame	25.79
Waltham Research Station; Main Barn	Green Paint	W-3	Front entrance sliding door	10.24
Waltham Research Station; Main Barn	White Paint	W-9	Wood trim around basement side door frames	36.24
Waltham Research Station; Main Barn	Brown Paint	W-10	Exterior wood siding shingles	0.07
Waltham Research Station; Calf Barn	Green Paint	W-4	Wood window and door frame trim	23.93
Waltham Research Station; Calf Barn	White Paint	W-5	Interior wood window frame trim	0.22
Waltham Research Station; Calf Barn	Orange Paint	W-6	Entrance door	0.02
Waltham Research Station; Calf Barn	Brown Paint	W-7	Interior wood window frame trim	0.57
Waltham Research Station; Calf Barn	White Paint	W-8	Exterior building walls	32.15

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Page 3

If you have any questions pertaining to this matter, please do not hesitate to contact our office.

Sincerely,
ENVIRONMENTAL COMPLIANCE SERVICES, INC.



Michael Grover
Compliance Technician
Asbestos Inspector #AI000201



Christopher L. Godfrey
Senior Project Manager

MG/CLG/kab
Attachments



ProScience Analytical Services, Inc.
22 Cummings Park, Woburn, MA 01801

Telephone: 781-935-3212
Facsimile: 781-932-4857
Email: chemistry@proscience.net

Laboratory Report

Contact: Chris Godfrey
Client: ECS, Incorporated
Address: 588 Silver Street
Agawam, MA 01001

Batch #: C 256837
Date received: 8/10/2009
Date analyzed: 8/10/2009
Date of report: 8/10/2009

Project # 01-207783
P.O.# n/a
Project Site: UMASS Watham
WR

Lead Analysis In Paint Using SW846-7420/3051
Results in weight percent on an "as received" wet weight basis
All results are accurate to no more than three significant figures.

Unless otherwise indicated, all the quality control criteria for the method above have been met.

Lab ID	Client ID	Sample date	Description	Result	Detection Limit	Comments
C 341029	W-1	8/7/09	White Paint On Wood Trim Around Doors & Windows, Garage	6.84	0.01	
C 341030	W-2	8/7/09	White/Tan- Large Door Frame Paint, Main Barn	25.79	0.01	
C 341031	W-3	8/7/09	Green-Entrance Door Paint, Main Barn	10.24	0.02	
C 341032	W-4	8/7/09	Green Window & Door Frame Paint, Calf Barn	23.93	0.02	
C 341033	W-5	8/7/09	White-Interior Window Frame Trim Paint, Calf Barn	0.22	0.01	
C 341034	W-6	8/7/09	Orange Entrance Door Paint, Calf Barn	0.02	0.01	
C 341035	W-7	8/7/09	Brown-Interior Window Frame Trim Paint, Calf Barn	0.57	0.01	
C 341036	W-8	8/7/09	White-Exterior Wall Paint, Calf Barn	32.15	0.01	
C 341037	W-9	8/7/09	White Trim Paint On Basement Door Fram Main Barn	36.24	0.01	
C 341038	W-10	8/7/09	Brown-Exterior Siding Shingles, Main Barn	0.07	0.01	

BDL - Below Detection Limit

Dan Pine, Chemistry Analyst
Stephen Chace, Chemistry Laboratory Manager
Adrian Stanca, Laboratory Director

ProScience Analytical Services, Inc.
Chemistry Chain of Custody Record/Metals

LABORATORY HEADQUARTERS CONSULTING SERVICES
 22 Cummings Park, Woburn, MA 01801
 T:781-935-3212 F:781-932-4857

Client: Environmental Compliance Services

Address: Street 568 Silver Street
 Town Agawam State/Zip MA 01001
 Project Site Line 1 UMASS Amherst Project Number 01-307783
 Line 2 WR more Wacham,
 Contact: Chris Godfrey/ Mike Grover Phone 413-789-3530
 ALNPager 413-789-2776

Rush/<6 Hours

Turn Around Time Requested

Same Day Next Day 48 Hours 72 Hours 4-5 Days

Town Agawam

State/Zip MA 01001

Turn Around Time Requested

Same Day Next Day 48 Hours 72 Hours 4-5 Days

Project Site Line 1 UMASS Amherst

Project Number 01-307783

Turn Around Time Requested

Same Day Next Day 48 Hours 72 Hours 4-5 Days

Line 2 WR more Wacham,

Turn Around Time Requested

Same Day Next Day 48 Hours 72 Hours 4-5 Days

Contact: Chris Godfrey/ Mike Grover Phone 413-789-3530

Turn Around Time Requested

Same Day Next Day 48 Hours 72 Hours 4-5 Days

ALNPager 413-789-2776

Turn Around Time Requested

Same Day Next Day 48 Hours 72 Hours 4-5 Days

Date Sampled 8/7/01

Field I.D. W - 1

Sample Description/Location White Paint on wood.

Type of Analysis PA

Air Sampling Information

Start Time

End Time

Flowrate

Length (inch)

Width (inch)

Volume (liters)

Flowrate

Area (sq in)

Weight (grams)

AA Reading

RESULT

Lab ID. 341027

Wiped area

Element Pb Cd Cr As Se Ag Ba Hg Other (please specify)

QC

FOR LABORATORY USE ONLY

Date Sampled 8/7/01

Field I.D. W - 2

Sample Description/Location Trim around Doors & Windows

Type of Analysis PA

Air Sampling Information

Start Time

End Time

Flowrate

Length (inch)

Width (inch)

Volume (liters)

Flowrate

Area (sq in)

Weight (grams)

AA Reading

RESULT

Lab ID. 341027

Wiped area

Element Pb Cd Cr As Se Ag Ba Hg Other (please specify)

QC

FOR LABORATORY USE ONLY

Date Sampled 8/7/01

Field I.D. W - 3

Sample Description/Location White/Tan Paint - Main Barn

Type of Analysis PA

Air Sampling Information

Start Time

End Time

Flowrate

Length (inch)

Width (inch)

Volume (liters)

Flowrate

Area (sq in)

Weight (grams)

AA Reading

RESULT

Lab ID. 341027

Wiped area

Element Pb Cd Cr As Se Ag Ba Hg Other (please specify)

QC

FOR LABORATORY USE ONLY

Date Sampled 8/7/01

Field I.D. W - 4

Sample Description/Location Green - Entrance Door

Type of Analysis PA

Air Sampling Information

Start Time

End Time

Flowrate

Length (inch)

Width (inch)

Volume (liters)

Flowrate

Area (sq in)

Weight (grams)

AA Reading

RESULT

Lab ID. 341027

Wiped area

Element Pb Cd Cr As Se Ag Ba Hg Other (please specify)

QC

FOR LABORATORY USE ONLY

Date Sampled 8/7/01

Field I.D. W - 5

Sample Description/Location White - Interior Window

Type of Analysis PA

Air Sampling Information

Start Time

End Time

Flowrate

Length (inch)

Width (inch)

Volume (liters)

Flowrate

Area (sq in)

Weight (grams)

AA Reading

RESULT

Lab ID. 341027

Wiped area

Element Pb Cd Cr As Se Ag Ba Hg Other (please specify)

QC

FOR LABORATORY USE ONLY

Date Sampled 8/7/01

Field I.D. W - 6

Sample Description/Location Orange - Entrance Door

Type of Analysis PA

Air Sampling Information

Start Time

End Time

Flowrate

Length (inch)

Width (inch)

Volume (liters)

Flowrate

Area (sq in)

Weight (grams)

AA Reading

RESULT

Lab ID. 341027

Wiped area

Element Pb Cd Cr As Se Ag Ba Hg Other (please specify)

QC

FOR LABORATORY USE ONLY

Date Sampled 8/7/01

Field I.D. W - 7

Sample Description/Location White - Frame Trim Paint

Type of Analysis PA

Air Sampling Information

Start Time

End Time

Flowrate

Length (inch)

Width (inch)

Volume (liters)

Flowrate

Area (sq in)

Weight (grams)

AA Reading

RESULT

Lab ID. 341027

Wiped area

Element Pb Cd Cr As Se Ag Ba Hg Other (please specify)

QC

FOR LABORATORY USE ONLY

Date Sampled 8/7/01

Field I.D. W - 8

Sample Description/Location White - Exterior Wall Paint

Type of Analysis PA

Air Sampling Information

Start Time

End Time

Flowrate

Length (inch)

Width (inch)

Volume (liters)

Flowrate

Area (sq in)

Weight (grams)

AA Reading

RESULT

Lab ID. 341027

Wiped area

Element Pb Cd Cr As Se Ag Ba Hg Other (please specify)

QC

FOR LABORATORY USE ONLY

Date Sampled 8/7/01

Field I.D. W - 9

Sample Description/Location White - Basement Door Frame

Type of Analysis PA

Air Sampling Information

Start Time

End Time

Flowrate

Length (inch)

Width (inch)

Volume (liters)

Flowrate

Area (sq in)

Weight (grams)

AA Reading

RESULT

Lab ID. 341027

Wiped area

Element Pb Cd Cr As Se Ag Ba Hg Other (please specify)

QC

FOR LABORATORY USE ONLY

Date Sampled 8/7/01

Field I.D. W - 10

Sample Description/Location Brown Shingles.

Type of Analysis PA

Air Sampling Information

Start Time

End Time

Flowrate

Length (inch)

Width (inch)

Volume (liters)

Flowrate

Area (sq in)

Weight (grams)

AA Reading

RESULT

Lab ID. 341027

Wiped area

Element Pb Cd Cr As Se Ag Ba Hg Other (please specify)

QC

FOR LABORATORY USE ONLY

Date Sampled 8/7/01

Field I.D. W - 11

Sample Description/Location Black Stone

Type of Analysis PA

Air Sampling Information

Start Time

End Time

Flowrate

Length (inch)

Width (inch)

Volume (liters)

Flowrate

Area (sq in)

Weight (grams)

AA Reading

RESULT

Lab ID. 341027

Wiped area

Element Pb Cd Cr As Se Ag Ba Hg Other (please specify)

QC

FOR LABORATORY USE ONLY